本邦産蚜亞族の目錄と四新種

A List of Japanese Aphidini with the Description of Four New Species

進 士 織 平 0. SHINJI

盛岡高等農林學校動物學教室

Zool. Lab., Morioka Coll. Agr. & Forestry

TRIBE APHIDINI SUBTRIBE Aphidini Genus Cerosipha

Cerosipha lycopicola Shinji n. sp.

Alate viviparous female

Body oblong, green. Head broader than long, infuscate. Eyes dark red, with ocular tubercles of the same colour. Proboscis reaching beyond the middle coxae, apical half dusky to black, the basal half being yellowish. Antennae 5 articulated, about as long as the body, infusoate and imbricate throughout the length, III longer than twice IV but shorter than V, provided with about 5 circular sensoria arranged in a row on the basal half, IV longer than the base of V, flagellum about 3 times as long as the base. Thorax black on both the dorsum and venter. Wings subhyaline, veins and stigma somewhat yellowish brown, fore wings with media twice branched, hind wing with both media and cubitus present. Legs with the distal half of tibiae and tarsi including claws black, the rest being light green. Abdomen yellowish with a pair of black maculae at the bases of cornicles. Cornicles subcylindric, infuscated. Cauda subconical, with 3-4 pairs of bristles, black. Anal plate, entire, black.

Measurements in mm:

Length of body 0.87 Length of fore wing 1.65
Antennal articles (III) 0.24 (IV) 0.12 (V) base 0.07 flagellum 0.22
Lengths of femora fore 0.18 middle 0.21 hind 0.30
Lengths of tibiae fore 0.39 middle 0.36 hind 0.45

/ Apterous viviparous female

Body oval, light yellow to yellowish green, with rather a few hairs. Head broader than long, with a few short hairs. Frontal tubercles almost lacking. Eyes red, with ocular tubercles of the same colour. Proboscis reaching to the hind coxae, distal half infuscate, the basal half being concolourous with the body. Antennae 5 articulated, shorter than body, I, II, and V black throughout, III and IV black at their apicen only, the remaining portions being concolourous with the body, III as long as IV and the base of VI taken together. Legs stout, distal parts of tibiae and tarsi including claws in fuscate, the remaining parts and articles being concolourous with the body. Cornicles

動物學雜誌,第 51 卷,第 7 號,佐々木忠次郎博士記念號,昭和 14 年 (1939)

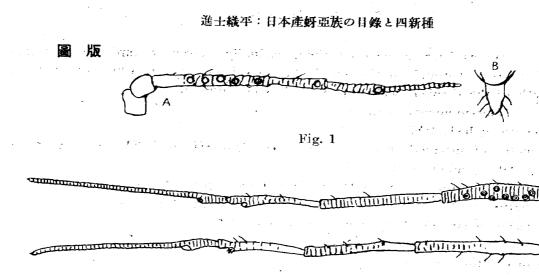


Fig. 2

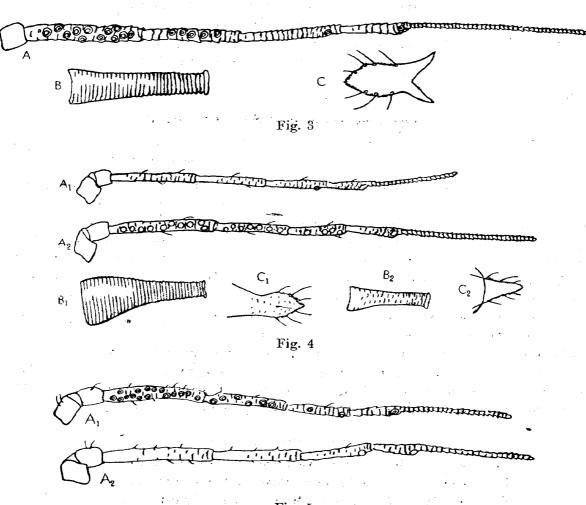


Fig. 5

subcylindric, nearly as long as the front tibia, gradually tapering toward the apex, imbricated and infuscate throughout the length. Cauda subconical, somewhat longer than half the length of the cornicle, with 4 pairs of bristles, infuscate.

Measurements in mm:

Length of body 0.87

Lengths of antennal articles: (I) 0.03 (II) 0.03 (III) 0.27 (IV) 0.28 (V) base 0.07 flagellum 0.21

Lengths of femora fore 0.18 middle 0.18 hind 0.28 Lengths of tibiae fore 0.35 middle 0.34 hind 0.50

Lengths of corvicle 0.20 Length of cauda 0.09

Host plant.....Lycopis Maackianus Makino

Type locality...Morioka, Japan.

Habits.....Infesting young leaves at or near the growing tip of the host plant, this species causes the curling or crumping of the leaves attacked. Very common in July and October.

Japanese name.....Shirone Gosetsuabura

Note. This is the thrid species of the genus Cerosipha found in Japan, the other 2 species being:

Cerosipha (Aphis) ichigocola Shinji, 1924, p. 394. Japanese name.....Ichigo Gosetsuabura Cerosipha (Aphis) serrissae Shinji, 1922, p. 799. Japanese name......Hakuchoge Gosetsuabura

Genus Aphis

Aphis mizutakarashi Shinji n. sp.

Alate viviparous female (Shijni; Monogr. Jap. Aphid. pp. 582-586)

Body suboval, dark green, with slender hairs. Head broader than long, infuscate. Proboscis reaching, to the middle coxa, distal part infuscate, basal part being concolourous with the body. Eyes dark red, almost black, with ocular tubercles of the same colour. Antennae 6-articulated, shorter than body, basal parts of III, IV and V light green, the remaining parts and articles being infuscate, from distal part of III on to the apex of VI imbricated. I broader than and as long as II, II longer than broad, III shorter than front tibia, provided with about 8 subcircular sensoria, IV longer than V, with about 2 secondary sensoria, V shorter than VI, flagellum of VI about 3 times as long as the base. Thorax well developed, dusky to black on both the dorsum and venter. Wings subhyaline, with veins and pterostigmata yellowish brown, midia of fore wings twice branched, hind wings with both media and cubitus present. Cornicles subcylindric, longer than the two tarsal articles of hind legs taken together, imbricated and infuscate throughout the length. Cauda rounded, with some long hairs, infuscate.

· Apterous viviparous female

Body suboval, bluish green with some brownish tint.

Host plant.....Cardamine lyrata Bunge (Mizutagarashi).

Type locality.....Miyakonojo, Miyazaki-ken, Kyushu, Japan.

Aphis heraclicola Shinji n. sp.

(Shinji, Monog. Jap. Aphid. P. 583-585).

Alate viviparous female

Body suboval to oblong, green, lateral papillae prominent. Head infuscate, frontal tubercles not prominent. Proboscis reaching beyond the middle legs, black at the distal part, the remaining part light yellow. Eyes red, with ocular tubercles of the same colour. Antennae 6-articulated, infuscate throughout the length and imbricated from III on to the apex of VI, I broader than II, II longer than broad, III somewhat shorter than the front femur, provided with 10-14 subcircular sensoria, IV subequal in length with V, provided with 4-8 subcircular sensoria in a row, V longer than twice the base of VI, with 3-4 secondary sensoria in addition to the primary one, the flagellum of VI about 3 times as long as the base. Thorax infuscate. Legs moderately long, basal four-fifths part of tibiae green, the remaining part and articles infuscate. Wings subhyaline with veins and stigma yellow, fore with media twice branched, the hind wings with both media and cubitus present. Abdomen green with black maculae on the middle part as well as along the lateral margins. Cornicles subcylindric, as long as III antennal article, imbricated and infuscate throughout the length. Cauda almost as long as cornicles, constricted near the basal part, provided with 7 long bristles, infuscate throughout the length. Anal plate rounded, black.

Measurements in mm:

Length of body 1.80 Length of fore wing 1.65
Lengths of antennal articles: (III) 0.165 (IV) 0.15
(V) 0.165 (VI) base 0.10 flagellum 0.30
Lengths of femora: fore 0.22 middle 0.21 hind 0.37
Lengths of tibiae fore 0.60 middle 0.50 hind 0.82
Length of cornicle 0.20 Length of cauda 0.12

Apterous viviparous female

Body oval, lateral papillae prominent, ground colour green. Head dusky, frontal tubercles not prominent. Proboscis reaching beyond the middle coxae, infuscate at the apex only, the rest being light green. Eyes promint, dark red, accompanied by ocular tubercles of the same colour. Antennae 6-articulated, shorter than body, I, II and VI infuscate throughout, the remaining articles light green, III shorter than fore femur, IV and V subequal, the latter with one primary circular sensorium near the apex, flagellum of VI about twice as long as the base which is half as long as V. Both the thorax and abdomen devoid of any black part or maculae. Legs stout, middle part of tibia light green, the remaining part and articles infuscate. Cornicles subcylindric, somewhat longer than antennal article III, imbricate and infuscate throughout the length. Cauda subconical, shorter than cornicle, black, with about 7 long bristles. Anal plate rounded, with some rather short hairs, dusky to black.

Measurements in mm:

Length of body 1.35

Lengths of antennal articles (I) 0.06 (II) 0.06

(III) 0.18 (IV) 0.15 (V) 0.14 (VI) base 0.75 Flagellum 0.21

Lengths of femora fore 0.19 middle 0.18 hind 0.22

436

Lengths of tibiae fore 0.37 middle 0.33 hind 0.50 Length of cornicle 0.15 Length of cauda 0.08 Host plant......*Heraclean lanatum* Michx. (Hanaudo). Type locality...Morioka, Japan.

Aphis taukogi Shinji n. sp.

(Shinji: Monogr. Jap. Aphid. pp. 577-579).

Alate viviparous female

Body oblong, with some hairs and prominent lateral papillae. Head broader than long, infuscate, frontal tubercles not prominent. Eyes prominent, dark red, accompanied by ocular tubercles of the same colour. Proboscis reaching beyond the second coxae, infuscate for the most part, provided with a few short hairs. Antennae 6-articulated, shorter than body, infuscate throughout the length and imbricated from the apex of III on to the apex of VI, I subequal in length with II but much broader, III the longest except VI, provided with 28-32 small subcircular sensoria, IV longer than V, with 8–18 small subcircular sensoria, V longer than the base of $\hat{V}I$ but decidedly shorter than twice the base, with 1-8 circular sensoria, the flagellum of VI about 3 times as long as the base. Thorax infuscate on both the dorsum and venter. Legs medium in size, with many hairs, basal one-quater of femur and five-sixths part of tibiae light green, the remaining parts and articles infuscated. Wings with veins and pterostigmata dusky to black, fore wings with media twice branched, hind wings with both media and cubitus present. Abdomen devoid of dorsal black maculation. Cornicles subcylindric, toward the apex gradually tapering, imbricate and infuscate throughout the length. Cauda subconical, constricted about the middle, with about 3 pairs of long hairs, concolourous with the body.

Measurements in mm:

Length of body 1.60 Length of fore wing 2.40
Lengths of antennal arts: (I) 0.06 (II) 0.06 (III) 0.29
(IV) 0.21 (V) 0.19 (VI) base 0.13 flagellum 0.35
Lengths of femora fore 0.35 middle 0.35 hind 0.40
Lengths of tibiae fore 0.70 middle 0.65 hind 0.85

Lengths of tibiae fore 0.70 middle 0.65 hind 0.85 Length of cornicle 0.19; Length of cauda 0.12

Host plant.....Bidens tripartita Linne' (Taukogi)

Type locality...Morioka, Japan.

Notes...Secondary host or hosts of this species have not yet been discovered. It infests the leaves near the growing point. During the months of September to October this species also attacks the flower. Late in November it produces sexual forms, the oviparous females of which lay eggs then.

Aphis neopolygonii Shinji n. sp.

(Shinji: Monogr. Jap. Aphid., pp. 533-535)

Alate viviparous female

Body oblong, with some hairs and lateral papillae, of which the mesothoracic and first abdominal ones are larger than any other. Ground colour salmon red. Head dusky, frontal tubercles rather prominent. Proboscis reaching beyond the middle coxal cavity,

distal half infuscate, the remaining art being light green. Antennae 6-articulated, shorter than body, imbricated from III on and infuscated throughout the length, with some hairs on each of the articles. I slightly larger than II, III shorter than the front femur, provided with about 5 long hairs and 28–32 subcircular sensoria of various sizes, IV and V subequal in length, the former with 12–15 circular sensoria besides 2 long hairs and the latter provided with 2–5 sensoria and 3 pairs of hairs, flagellum of VI about 3 times as long as the base. Thorax infuscate. Legs with the extremities of femur and tibia in addition to tarsi including claws black, the remaining parts and articles light green. Wings subhyaline with veins and pterostigma yellowish brown. Media of fore wing twice branched, hind wings with both media and cubitus present. Abdomen often with dusky maculae along the lateral margines. Cornicles subcylindric, somewhat longer than antennal article IV, imbricated and infuscate throughout the length. Cauda subconical, constricted about the middle, with about 5 pairs of long hairs, infuscate throughout. Anal plate rounded, with long hairs, black.

Measurements in mm:

Length of body 0.90 Length of fore wing 2.00 Lengths of antennal article: (III) 0.25 (IV) 0.15

(V) 0.11 (VI) base 0.10 flagellum 0.27

Length of femur: fore 0.20 middle 0.20 hind 0.25 Length of tibia: fore 0.50 middle 0.50 hind 0.75 Length of cornicle: 0.10 Length of cauda 0.06

Type locality.....Morioka, Japan.

Host plants.....Fagopyrum esculentum Moench. and Barbara vulgaris, R. Br. var. strieta, Regel.

Japanese name.....Soba Abura

A List of Aphis Found in Japan Proper

The following are a synopsis of Aphis found in Japan Proper:

- 1. Aphis bambusae Fullaway, Ann. Rept. Hawai Agri. Expt. St. 1909, p. 35 (1910).

 Melanaphis bambusae van der Goot, Contr. Fauna Indes Neerl, I, no. 3 p. 61(1917).

 Japanese name—Sasa Abura.
- Aphis citriscidus, Kirkaldy, Proc. Ent. Soc. Hawaii, I, p. 10, (1910).
 Myzus citricidus Shiraki, Agr. Expt. St. Formosa, Spec. Rept. 8, p. 112 (1913).
 Aphis taveresi del Guercio, Redia, XII p. 217 (1917).
 Japanese name—Mikan Abura.
- 3. Aphis aeglis Shinji, Journ. Zool, XXXIV, p. 793 (1922). Japanese name—Karatachiabura.
- 4. Aphis doroserae Takahashi, Aphid. Form. I, p. 51 (1921). Japanese name—Mausengoke Abura.
- 5. Aphis flipandulae Matsumura, Journ. Coll. Agr. Tohoku Imp. Univ. VI, 6, p. 385 (1917).

Japanese name-Natsuyuki Abura.

6. Aphis fukii Shinji, Journ. Zool, XXXIV, p. 795 (1922). Aphis fukis Monzen, Monog, Saito Ho-on Kai, i, p. 64 (1929).

Japanese name—Fuki Abura.

7. Aphis glycines Matsumura, Journ. Coll. Agr. Tohoku Imp. Univ. VII, 6, p. 387 (1917).

Japanese name-Daizu Abura.

8. Aphis gossypii Glover, Rept. Comm. Agr. U.S.A. 1876, p. 36 (1877).

Aphis malvae Koch, Die Pflanzenlause, p. 125 (1857).

Aphis tectorae van der Goot, Fauna Indes Neerl., I, iii p. 3 (1917).

Aphis shirakii Takahashi, Aphid. Formosa, I, p. 58 (1927).

Aphis clerodendri Matsumura, Journ. Coll. Agr. Tohoku Imp. Univ., VII, p. 385 (1917).

Aphis colocasiae Matsumura, loc. cit., p. 386 (1918).

Aphis gossypii var. callicarpae Takahashi, Aphid. Formosa, I, p. 46 (1921).

Aphis vitifoliae Shinji, Journ. Zool. XXXIV, p. 800 (1922).

Aphis hibiscifoliae shinji, loc. cit. p. 796 (1922).

Aphis inugomae Shinji, loc. cit., p. 796 (1922).

Aphis bryophyllae Shinji, loc. cit., p. 793 (1922).

Toxoptera odorikonis Matsumura, Journ. Coll. Agri. Tohoku Imp. Univ., p. 387 (1917).

Toxoptera leonuri Takahashi, Aphid. Formosa, I, p. 41 (1921).

Japanese name-Wata Abura.

9. Aphis horii Takahashi, Aphid. Formosa II, p. 61 (1923).

Japanese name-Hori Abura.

10. Aphis ichigo Shinji, Journ. Zool. XXXIV, p. 799 (1922).

Japanese name-Ichigo Abura.

11. Aphit kurosawai Takahashi, Aphid. Formosa I, p. 53 (1921).

Japanese name-Kuroswawa Abura.

12. Aphis indigoferae Shinji, Journ. Zool., XXXIV, p. 797 (1922).

Japanese name—Komatsunagi Abura.

13. Aphis laburni Kaltenbach, Monog. Pflanzenlaüse, p. 85 (1857).

Aphis rumicis Maki, Agr. Expt. St. Formosa, 108 (1916).

Aphis medicaginis Koch, Die Pflanzenlaüse, p. 94 (1857).

Japanese name—Mame Abura.

Aphis maidis Fitch, Insects New York, I, p. 318 (1855).
 Siphonaphis van der Goot, Contr. Fauna Ind. Neerl., I, p. 67 (1917).

Japanese name—Kibi Abura.

15. Aphis malvoides VAN DER GOOT, Contr. Fauna Ind. Neerl., p. 96 (1917).

. Japanese name—Geniaoi Abura.

Aphis (Longiunguis) odivae van der Goot, Contr. Fauna Ind. Neerl. I, p. 113(1917).
 Aphis somei Essig and Kuwana, Proc. Cal. Acad. Sci., 4th ser. VIII, pt. 7, p. 75 (1918).

Aphis rutae Shinji, Journ. Zool., XXXIV, p. 799 (1922).

Aphis Moklen Shinji, loc. cit p. 797 (1922).

Aphis ficicola Takahashi, Aphid. Formosa, I, 57 (1921).

Aphis araliae Matsumura

Arimakia araliae Matsumura, Journ. Coll. Agr. Tohoku Imp. Univ., VII, p. 407 (1917).

日本産蚜亞族の目錄と四新種

Arimakia taranbonis Matsumura, loc. cit., p. 17 (1917).

Japanese name—Haze Abura.

- 17. Aphis perillae Shinji, Journ. Zool., XXXIV, 798 (1922).

 Japanese name—Shiso Abura.
- 18. Aphis nerii Fonscolombe, Ann. Soc. Ent. France, X, p. 179 (1841).

 Japanese name—Kiochikutau Abura.
- 19. Aphis pirifoliae Shinji, Journ. Zool., XXXIV, p. 798 (1922). Japanese name—Nashi Abura.
- 20. Aphis polygonacea Matsumura, Journ. Coll. Agr. Tohoku Imp. Univ. VII, 6, p. 389 (1917).

Japanese name—Tade Abura.

21. Aphis pomi Deger, Mem. des Ins., III, p. 53 (1773).

Aphis kogomecola Matsumura, Journ. Coll. Agr. Tohoku Imp. Univ., VII, 6, p. 388(1917).

Aphis croomiae Shinji, Journ. Zool. XXXIV, p. 794 (1922).

Aphis deutziae Shinji, loc. cit., p. 795 (1922).

Japanese name—Ringo Abura.

- 22. Aphis punicae Shinji, Journ. Zool. XXXIV, p. 798 (1922).

 Japanese name—Zakuro Abura.
- 23. Aphis rumicis Linné, Syst. Nat. 10th Ed., I., I, p. 451 (1758)
 Aphis atriplicis Fabricius, Syst. Ent., p. 736 (1775).
 Aphis euonymi Fabricius, loc. cit., p. 736 (1775).
 Aphis paperveris Fabricius, Gene. Ins., p. 303 (1776).
 Aphis viciae Fabricius, Spec. Ins., p. 390 (1781).
 Aphis thlaspeos Schrank, Fn. Boica, II, p. II' (1801).
 Aphis armata Hausmann, Ill Msg., Zool. I, p. 439 (1802).

Japanese name-Gishigishi Abura.

- 24. Aphis sacchari Zehntner, Arch. Java Suiker-Industrie, IX, p. 674 (1901).

 Aphis miscanthi Takahashi, Aphid Formosa, I, p. 55 (1921).

 Aphis formosanus Takahashi, Aphid. Formosa, I, p. 54 (1921).

 Japanese name—Susuki Abura.
- 25. Aphis saliceti Kaltenbacm, Monog. p. 103 (1843).

 Aphis yanagicola Matsumura, Journ. Coll. Agri. Tohoku Imp. Univ., VII, p. 390(1917).

 Japanese name—Yanagi Abura.
- 26. Aphis sambuci Linné, Syst. Nat., I, p. 735 (1767).

 Japanese name—Niwatoko Abura.
- 27. Aphis smilacifoliae Takahashi, Aphid. Formosa, I, p. 49 (1921).

Japanese name—Sarutori Abura.

28. Aphis utsugicola Monzen, Saito Ho-on Kai Monog. 2, p. 54 (1929).

Japanese name—Utsugi Abura.

Explanation Figures

FIG. 1

Cerosipha lycopicola Shinji

Antenna and cauda of alate viviparous female

FIG. 2

Aphis mizutakarashi Shinji